

**Work Order ID 62152**

Friday, September 17, 2010 1:39:58 PM

Page 1

Item ID: D2574

Accept

Setup Start

Revision ID:

Stop

Item Name: Saddle, Aft In 205

Start Date: 9/17/2010 Start Qty: 12.00

Cust Item ID:

Required Date: 9/24/2010 Req'd Qty: 12.00

Customer:

Reference:

Approvals: Process Plan: 

Date: 10-9-17

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2574

Rev E

100

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical-machine #1

Program Batch No. 62152 Double check by: \_\_\_\_\_ ☐ 1-Machine Step No  
1 per Folio FA051 and inspect per attached Dimension Sheets 2-Machine Step  
No 2 per Folio FA051 and inspect per attached Dimension Sheets ☐ 3-Machine  
Step No 3 per Folio FA051 and insp

SA 10/11/07

12 0

110

0.00



CONVENTIONAL MILLING MACHINE

Mill Conv

Memo

0.00

Conventional Milling Machine

Machine keyway as per dwg D2573 &amp; D2574

SA 10/11/07

12 0

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

SA 10/11/07

12 0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 62152

Friday, September 17, 2010 1:39:58 PM



Page 2

Item ID: D2574

Accept



Setup Start



Revision ID:

Stop



Item Name: Saddle, Aft In 205

Start Date: 9/17/2010 Start Qty: 12.00



Cust Item ID:

Required Date: 9/24/2010 Req'd Qty: 12.00

Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

B.A 10/11/01

12

0

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

=> M 10/14/01

12

0

150

White Gloss(Ref.4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

M115291

START TIME:

7:20

OVEN TEMPERATURE:

320 ° FINISH TIME:

7:50

12

BK 10-11-02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 62152

Friday, September 17, 2010 1:39:58 PM



Page 3

Item ID: D2574

Accept



Setup Start



Revision ID:

Stop



Item Name: Saddle, Aft In 205

Start Date: 9/17/2010 Start Qty: 12.00



Cust Item ID:

Required Date: 9/24/2010 Req'd Qty: 12.00



Customer:

Reference:

Run Start



Approvals: Process Plan: Date: Tooling: Date:

Stop



QC: Date: SPC (Y/N): Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

160

QC3- Inspect Part Finish

0.00

*bb*

*10/11/02*

*12*

*0*



QC

Memo

0.00

Quality Control

170

Identify as per dwg & Stock Location: *434*

0.00



Packaging

Memo

0.00

Packaging

*12/11/02 (12)*

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

*Carlyle 10/11/02*  
*MF*  
*10-11-02*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Page 1

Friday, September 17, 2010 1:40:03 PM

Work Order ID: 62152



Parent Item: D2574



Parent Item Name: Saddle, Aft In 205


Start Date: 9/17/2010

Required Date: 9/24/2010

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev: I As Per RevE 06-01-27 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-005  Saddle Billet		Manufactured	No			110	Each	25.0000	1	12		10/11/01	

Location

Loc Qty

Loc Code

MAT46

25

46411 ✓

25

12

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 62152
<b>Description:</b> Saddle, Aft Inboard		<b>Part Number:</b> D2574
<b>Inspection Dwg:</b> D2574 Rev. E		<b>Page 1 of 1</b>

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.438	0.443		.443	.443	.443	.443		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.001	8.001	8.002	8.002		
F	0.490	0.510		.501	.501	.499	.500		
G	0.257	0.262		.259	.259	.259	.259		
H	0.375	0.380		.378	.378	.378	.378		
I	0.490	0.510		.502	.502	.499	.502		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.568	.570	.571	.568		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.499	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.127	.127	.126	.126		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.249	.250	.248	.249		
S	0.115	0.135		.131	.128	.127	.127		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.228	3.228	3.228	3.228		
V	0.230	0.250		.241	.241	.241	.241		
W	0.115	0.135		.130	.132	.132	.129		
X	0.307	0.312		.310	.310	.310	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.363	.364	.363	.364		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.628	.629	.628	.629		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.247	.247	.247	.248		
AE	1.500	1.520		1.511	1.512	1.505	1.510		
AF	0.115	0.135		.135	.135	.135	.138		
AG	0.240	0.280		.280	.280	.277	.280		
AH	0.240	0.260		.249	.246	.247	.248		
AI	2.000	2.020		2.001	2.002	2.001	2.001		
AJ	0.023	0.043		.030	.030	.030	.030		
Accept/Reject									

Measured by: SA
Date: 10/10/25

Audited by: H A
Date: 10/11/01

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 62152
<b>Description:</b> Saddle, Aft Inboard		<b>Part Number:</b> D2574
<b>Inspection Dwg:</b> D2574 Rev. E		<b>Page 1 of 1</b>

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				15	16	17	18		
A	0.438	0.443		.443	.443	.443	.443		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.001	8.001	8.002	8.002		
F	0.490	0.510		.500	.501	.501	.503		
G	0.257	0.262		.259	.259	.259	.259		
H	0.375	0.380		.378	.378	.378	.378		
I	0.490	0.510		.502	.502	.502	.503		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.570	.570	.570	.571		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.126	.126	.126	.126		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.249	.249	.249	.249		
S	0.115	0.135		.126	.126	.127	.127		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.228	3.228	3.228	3.228		
V	0.230	0.250		.242	.242	.242	.242		
W	0.115	0.135		.127	.127	.127	.127		
X	0.307	0.312		.310	.310	.310	.310		
Y	0.760	0.765		.761	.761	.761	.761		
Z	0.352	0.372		.364	.364	.363	.365		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.628	.628	.628	.628		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.247	.247	.246	.247		
AE	1.500	1.520		1.510	1.510	1.510	1.510		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.278	.278	.278	.278		
AH	0.240	0.260		.248	.248	.246	.248		
AI	2.000	2.020		2.000	2.000	2.000	2.000		
AJ	0.023	0.043		.030	.030	.030	.030		
Accept/Reject									

Measured by:	SA
Date:	10/10/25

Audited by:	M.A
Date:	10/11/01

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 62152
<b>Description:</b> Saddle, Aft Inboard		<b>Part Number:</b> D2574
<b>Inspection Dwg:</b> D2574 Rev. E		<b>Page 1 of 1</b>

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				9/1	102	11/3	124		
A	0.438	0.443		.443	.443	.443	.443		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.002	8.002	8.002	8.002		
F	0.490	0.510		.498	.498	.498	.498		
G	0.257	0.262		.259	.259	.255	.255		
H	0.375	0.380		.378	.378	.378	.378		
I	0.490	0.510		.502	.502	.502	.502		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.570	.571	.570	.570		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.499	2.500	2.499	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.126	.127	.126	.127		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.249	.248	.248	.247		
S	0.115	0.135		.127	.127	.127	.125		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.228	3.228	3.228	3.228		
V	0.230	0.250		.272	.272	.272	.274		
W	0.115	0.135		.127	.127	.127	.129		
X	0.307	0.312		.310	.310	.310	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.364	.364	.364	.364		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.628	.628	.628	.628		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.247	.247	.246	.247		
AE	1.500	1.520		1.510	1.510	1.511	1.511		
AF	0.115	0.135		.138	.138	.138	.138		
AG	0.240	0.280		.248	.248	.248	.248		
AH	0.240	0.260		.248	.248	.248	.248		
AI	2.000	2.020		2.000	2.000	2.000	2.000		
AJ	0.023	0.043		.030	.030	.030	.030		
Accept/Reject									





Measured by:	S.A.
Date:	10/10/28

Audited by:	M.A.
Date:	10/11/01

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	




05.12.06 *[Signature]*

MATERIAL: 7075-T7351 (QQ-A-250/12)  
(REF DART SPEC. D6102-003)  
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1  
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER  
DART QSI 005 4.3  
BREAK ALL SHARP EDGES 0.010 TO 0.020  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- |   |  |
|---|--|
|  | ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010 |
|  | CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)      |
|  | CHAMFER 0.063 x 45° ALL AROUND                                   |
|  | CHAMFER 0.033 x 45° (SEE DETAIL C)                               |

VIEW B-B

E	05.07.13	ADD CHAMFER ON RIDGE NOTE 4
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCRP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE

DESIGN	DRAWN BY		DART AEROSPACE LTD. MARKHAM, ONTARIO, CANADA
DS	PH		
CHECKED 	APPROVED 	DRAWING NO. D2574	REV.
			SHEET 1 OF
DATE 05.07.13	TITLE INNER AFT SADDLE		SCALE 2:

**COPYRIGHT © 2006 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL  
AND IS SUPPLIED ON THE EXPRESS CONDITION  
THAT IT IS NOT TO BE USED FOR ANY PURPOSE  
OR COPIED OR COMMUNICATED TO ANY OTHER  
PERSON WITHOUT WRITTEN PERMISSION FROM  
DART AEROSPACE LTD.

DETAIL C  
SCALE 2:1

(TYP